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Title: REDUCTION OF ANTIOXIDANT ENZYME LEVELS IN TUMOR CELLS USING ANTISENSE OLIGONUCLEOTIDES

IN THE CLAIMS

Please amend the claims as follows:

- 1. (Cancelled)
- 2. (Previously Presented) The oligonucleotide of claim 6 or 7, wherein the antisense nucleic acid is about 20 nucleotides in length.
- 3. (Previously Presented) The oligonucleotide of claim 6 or 7, wherein the antisense nucleic acid sequence is phosphorothiolated.
- 4. (Cancelled)
- 5. (Previously Presented) The oligonucleotide of claim 6 or 7, wherein the antioxidant enzyme is catalase or phospholipid glutathione peroxidase.
- 6. (Currently amended) An oligonucleotide comprising an antisense nucleic acid sequence that is about 18 to 26 nucleotides in length, is 90% complementary to and is capable of specifically binds binding to a contiguous portion of a nucleic acid encoding that includes a start codon for a human antioxidant enzyme start codon, wherein the antisense sequence is about 18 to 26 nucleotides in length, and wherein the antioxidant enzyme is manganese superoxide dismutase, copper and zinc superoxide dismutase, catalase, phospholipid glutathione peroxidase, or cytosolic glutathione peroxidase, wherein the antisense nucleic acid sequence is 90% complementary to a portion of the nucleic acid encoding an antioxidant enzyme.
- 7. (Currently amended) An oligonucleotide comprising an antisense nucleic acid sequence that is about 18 to 26 nucleotides in length, is 100% complementary to and is capable of that specifically binds binding to a contiguous portion of a nucleic acid encoding that includes a start codon for human antioxidant enzyme start codon, wherein the antisense sequence is about 18 to 26 nucleotides in length, and wherein the antioxidant enzyme is manganese superoxide

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dismutase, copper and zinc superoxide dismutase, catalase, phospholipid glutathione peroxidase, or cytosolic glutathione peroxidase, wherein the antisense nucleic acid sequence is 100% complementary to a portion of the nucleic acid encoding an antioxidant enzyme.

8. (Currently amended) A method of treating a tumor in a mammal comprising reducing antioxidant enzyme levels in a cell by administering a therapeutic agent comprising an antisense nucleic acid sequence that is about 18 to 26 nucleotides in length and is capable of that specifically binds binding to a contiguous portion of a nucleic acid encoding that includes a start codon for a human antioxidant enzyme start codon, wherein the antisense sequence is about 18 to 26 nucleotides in length, and wherein the antioxidant enzyme is manganese superoxide dismutase, copper and zinc superoxide dismutase, catalase, phospholipid glutathione peroxidase, or cytosolic glutathione peroxidase.

9-10. (Cancelled)

- (Previously presented) The method of claim 8, wherein the therapeutic agent is injected 11. into the tumor.
- (Original) The method of claim 8, wherein the mammal is a human. 12.
- (Original) The method of claim 8, wherein the therapeutic agent further comprises a 13. delivery vehicle.
- (Original) The method of claim 13, wherein the delivery vehicle is lipofectamine or -[1-14. (2,3-dioleoyloxy)propyl]-N,N,N-trimethylammonium methyl sulfate ("DOTAP").
- 15. (Previously presented) The method of claim 8, wherein the antisense nucleic acid sequence is phosphorothiolated.

16-17. (Cancelled)

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- 18. (Currently amended) The method of claim 8, wherein the antisense nucleic acid sequence is 90% complementary to a the portion of the nucleic acid encoding an for the antioxidant enzyme.
- 19. (Currently amended) The method of claim 8, wherein the antisense nucleic acid sequence is 100% complementary to a <u>the</u> portion of the nucleic acid encoding an <u>for the</u> antioxidant enzyme.
- 20. (Previously Presented) An oligonucleotide comprising an antisense nucleic acid sequence that specifically binds to a nucleic acid encoding an antioxidant enzyme start codon, wherein the sequence is SEQ ID NO:2.
- 21. (Previously presented) The oligonucleotide of claim 20, wherein the antisense nucleic acid sequence is phosphorothiolated.
- 22. (Previously Presented) The oligonucleotide of claim 6 or 7, wherein the antioxidant enzyme is manganese superoxide dismutase.
- 23. (Previously Presented) The oligonucleotide of claim 6 or 7, wherein the antioxidant enzyme is copper and zinc superoxide dismutase.
- 24. (Previously Presented) The oligonucleotide of claim 6 or 7, wherein the antioxidant enzyme is catalase.
- 25. (Previously Presented) The oligonucleotide of claim 6 or 7, wherein the antioxidant enzyme is phospholipid glutathione peroxidase.
- 26. (Previously Presented) The oligonucleotide of claim 6 or 7, wherein the antioxidant enzyme is cytosolic glutathione peroxidase.